## **Project Description**

This Casita is fully accessible. It can accommodate one, two, or more occupants. It has 2 bedrooms (one of which is fully accessible when furnished with a double bed), an open Kitchen, Dining and Living area, Washer/ Dryer, Entry Closet, Bath and Mechanical Room. The heated square footage is 799 sq. ft.

There is a 270 sq. ft. trellised patio on the east side and a 338 sq. ft. carport on the west. A low fenced enclosure on the south side contains the rain barrel and the HVAC condenser. There are (16) – photovoltaic panels on the roof that provide for a 4kW system. The Casita is clad in a light grey colored stucco with a dark metal fascia.

The design is based on an estimated lot size of 8,000 sq. ft. with an existing residence of 1,600 sq. ft. The Lot Coverage is 43.5%.

## **Project Narrative**

Universal Design/ Accessible Casita Key features:

- 1. Bedroom One is fully accessible and furnished with a double bed.
- 2. The kitchen counter height is 34".
- 3. The 34" high table doubles as kitchen work surface.
- 4. There is 3'-6" clearance between the counter and table.
- 5. The sink and induction cooktop have accessible knee space.
- 6. There is a 2-drawer refrigerator/ freezer.
- 7. There is a combination Microwave/ convection oven.
- 8. The built-in pantry is 4' wide with storage drawers below.
- 9. The bathroom sink has accessible knee space.
- 10. The roll-in shower is accessible.
- 11. 2'-10" doors are provided throughout with 18" clearances on the pull and 12" on the push sides.
- 12. The hallway is 3'-6" wide.
- 13. There is a 5' diameter turning radius in the Entry/ Storage Closet.
- 14. The compact W/D closet has (2) pocketed doors that open to 4'-0".
- 15. The thresholds at the entries from the carport & patio are ½" high.
- 16. The living room has 18" deep 30" tall storage drawers the entire width of the room.
- 17. There is a 13'-0" x 18'-0" ADA parking space.

Low-Cost/ Innovative Casita This Casita will use "advanced framing techniques".

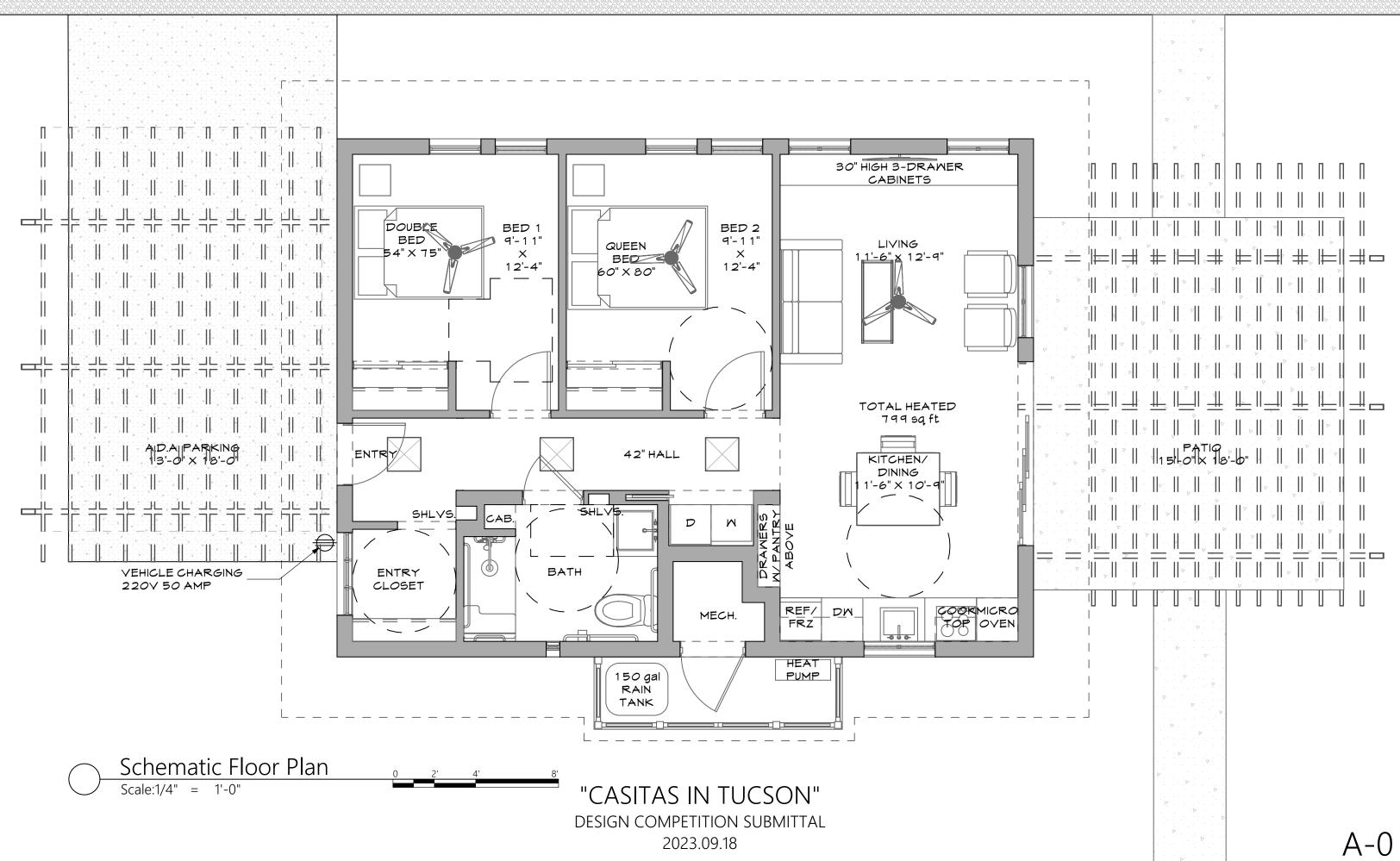
## Key features:

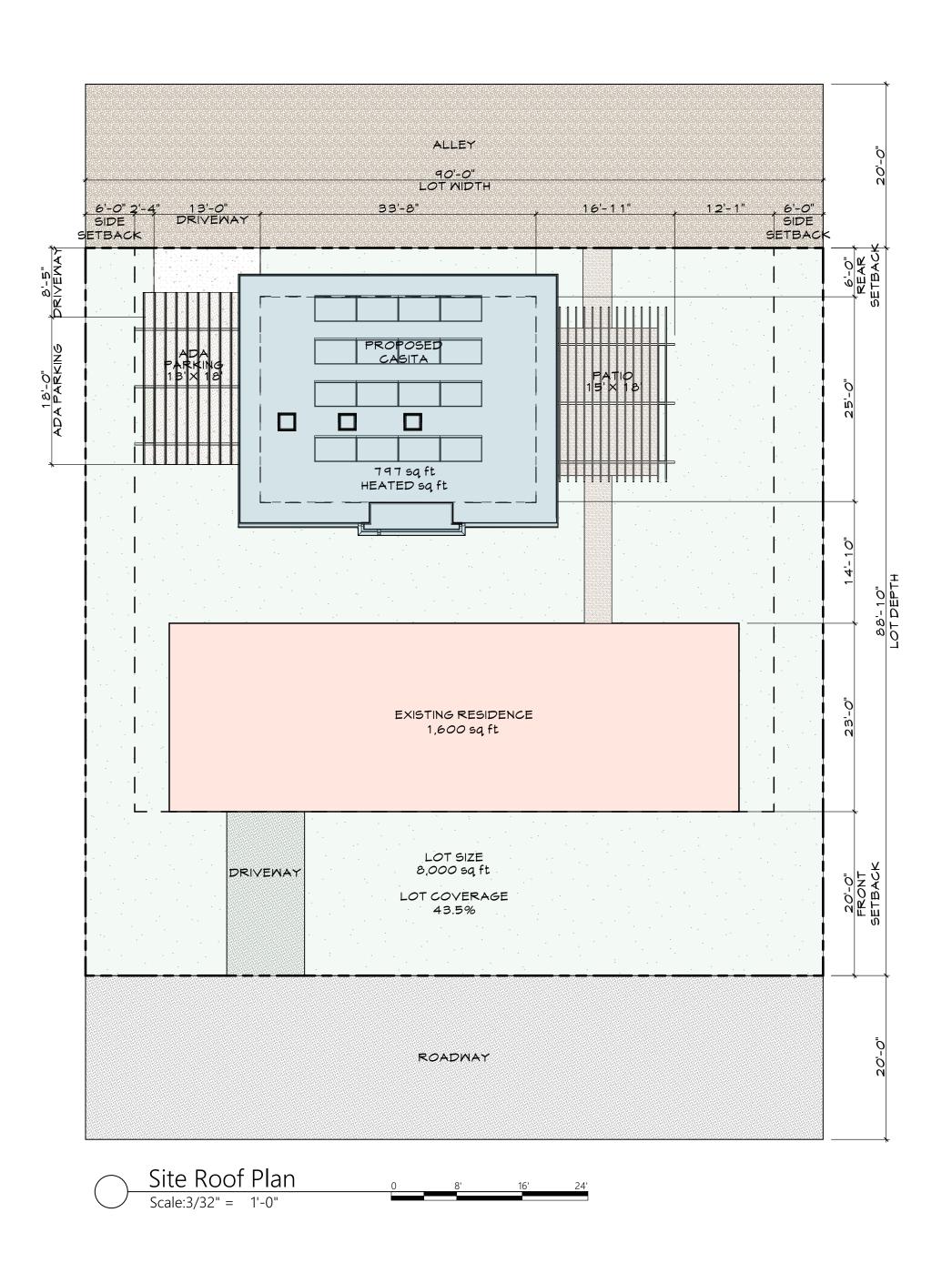
- 1. 2x6 walls at 24" o.c. with 5 1/2" of blown-in cellulose insulation
- 2. Single 2x6 top plates
- 3. 3 stud California corners
- 4. ½" "ZIP" wall sheathing taped at the seams
- 5. The exterior is clad in 1 ½" rigid EPS insulation. It joins the ICF stem walls.
- 6. 11 7/8" TJI roof rafters will be 24" o.c. and will be covered by 5/8" "ZIP" sheathing.
- 7. The roofing material will be a white-coated EPDM "rubber roof".

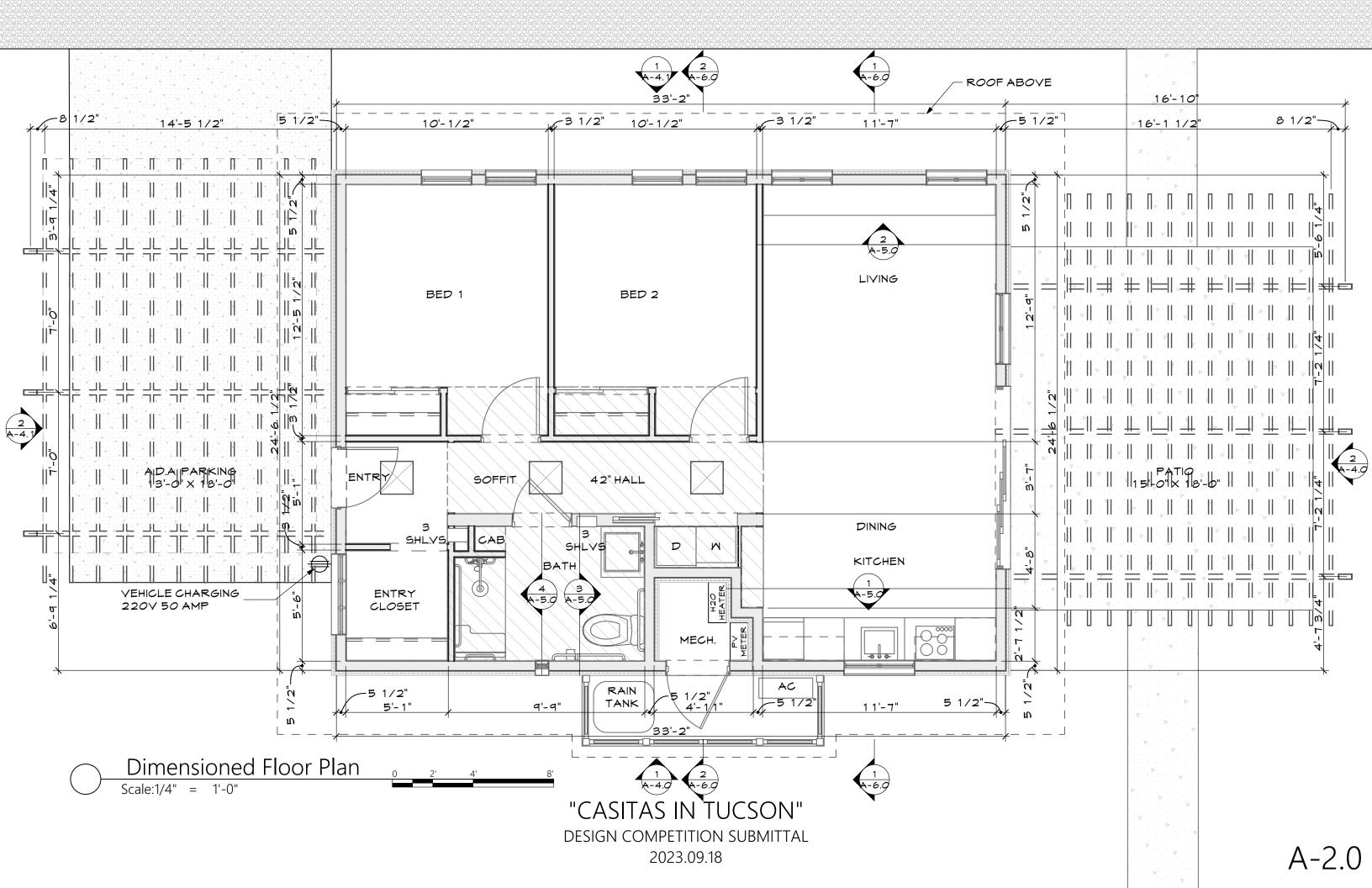
8. Window openings are 4' or less and will use headers consisting of (2) -2x6's around 2  $\frac{1}{2}$ " of rigid insulation. An additional 1  $\frac{1}{2}$ " of rigid insulation on the exterior will provide a total R value of 20.

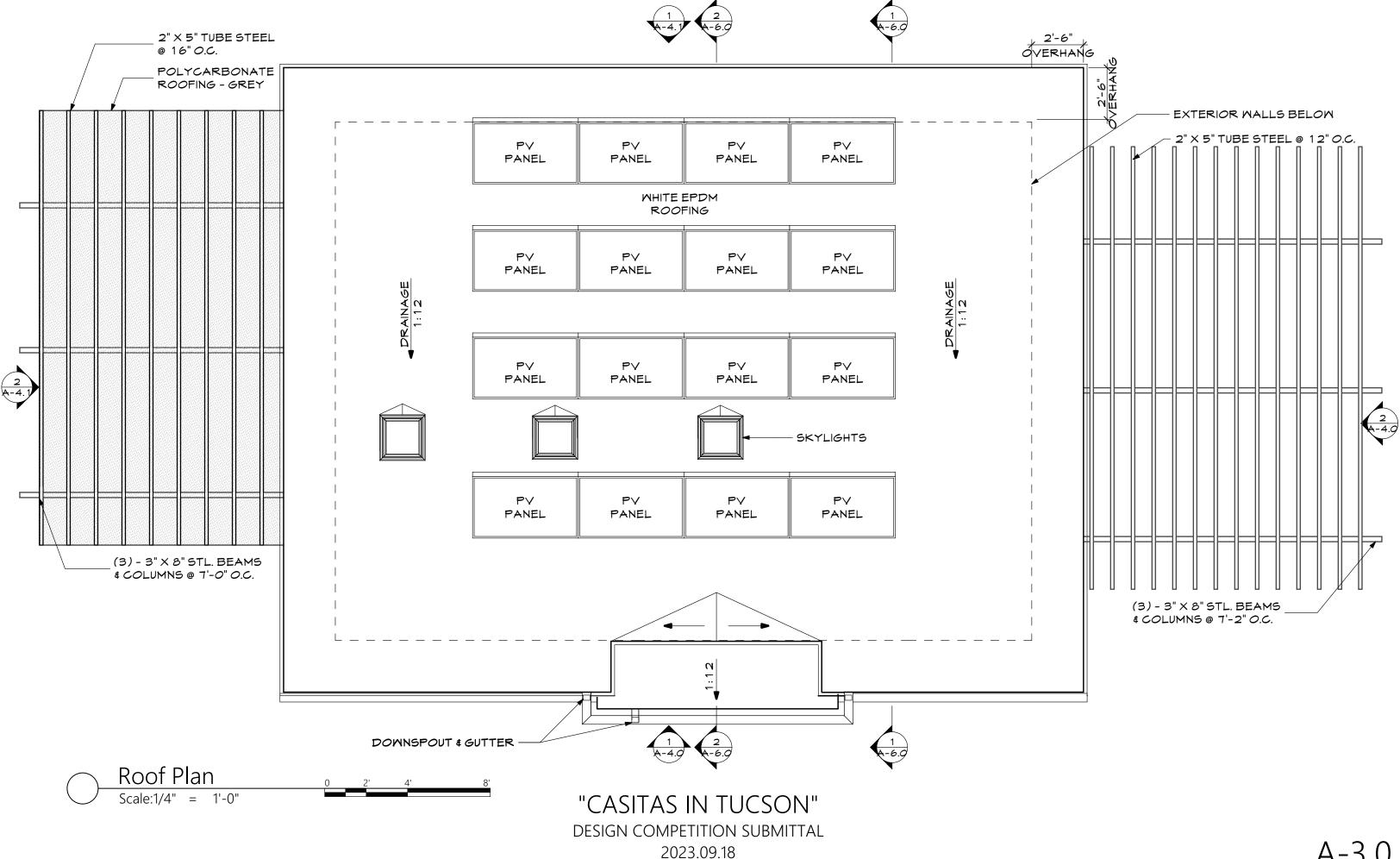
## Other Low-Cost/ Innovative features:

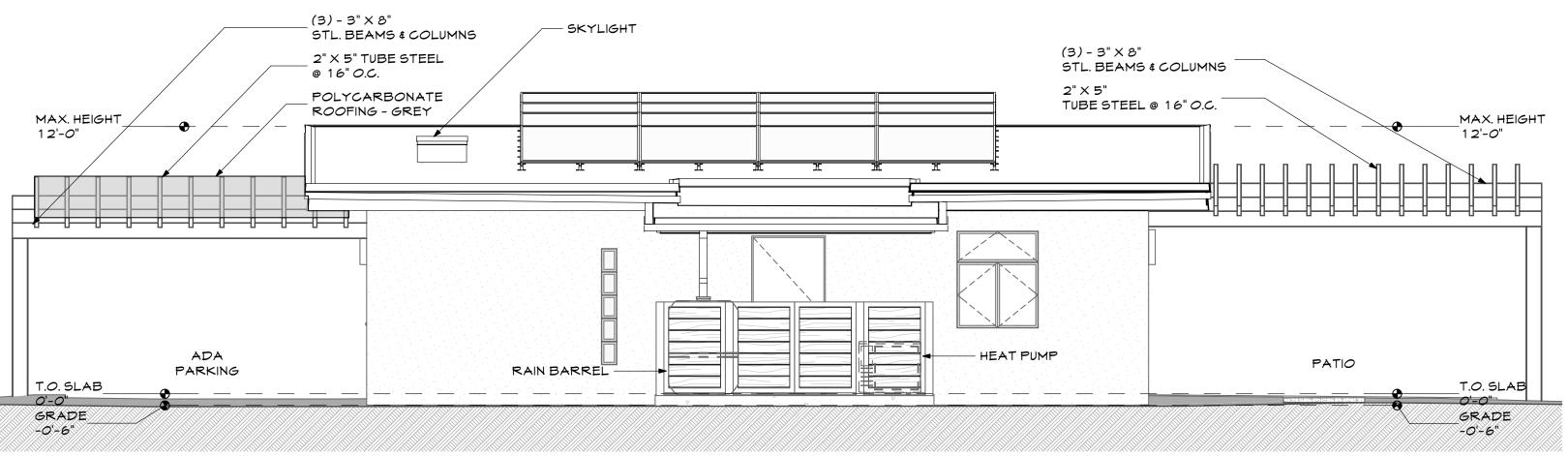
- 1. There is no gas line to be installed.
- 2. Ducted heat pump provides for heating and cooling.
- 3. The concrete floor slab will be stained & polished eliminating the need for wood, carpet or tile.
- 4. The slab is insulated from below with 2" of rigid insulation. This insulation is connected to the ICF's used for the stem walls.
- 5. The Roof TJI's extend 2'-6" beyond the face of the exterior walls and will mitigate moisture penetration and heat gain. The south facing kitchen will only receive direct sunlight from September through March. See 1/ A-6.0.
- 6. There will be a tankless water heater in the Mechanical Room.
- 7. The Casita will have (16) photovoltaic panels creating a 4kW system.
- 8. A rain catchment system will capture 8,500 gallons of water per year qualifying for a \$2,000 rebate.
- 9. Additional rebates available: \$100 for a high-efficiency toilet, \$100 \$200 for a high-efficiency clothes washer and a \$1,000 for the installation of a grey water system.
- 10. There will be an electric vehicle charging station.

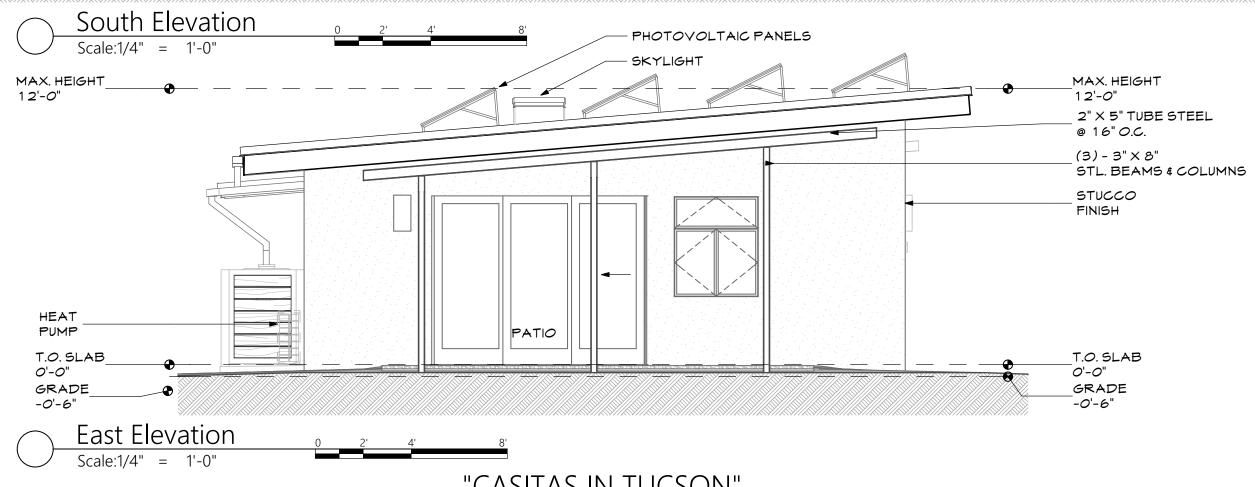


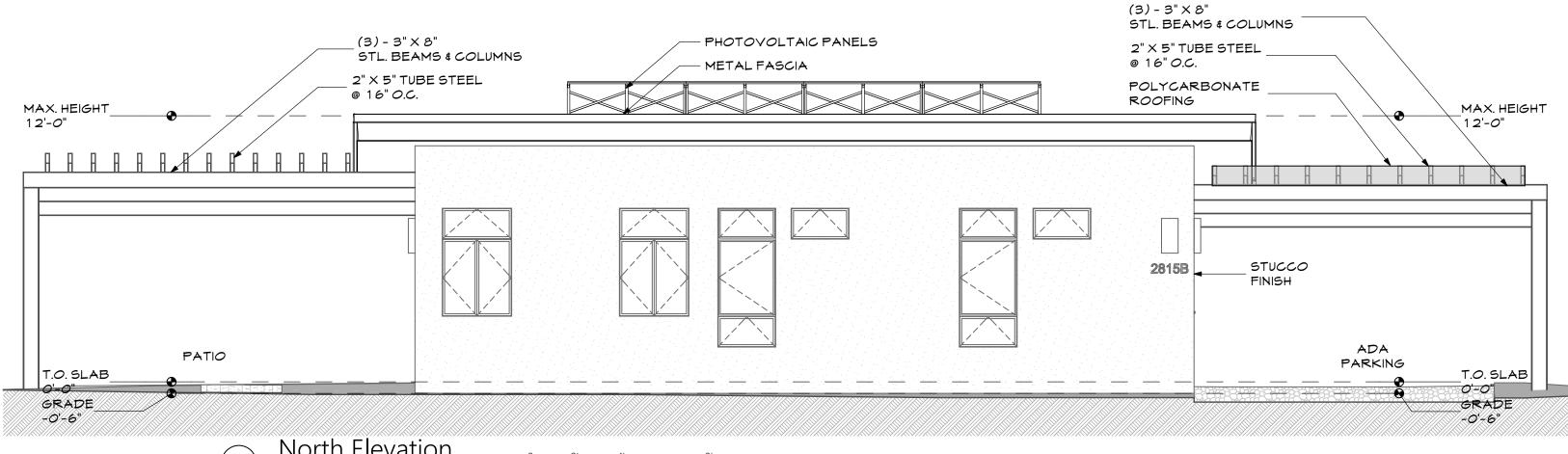


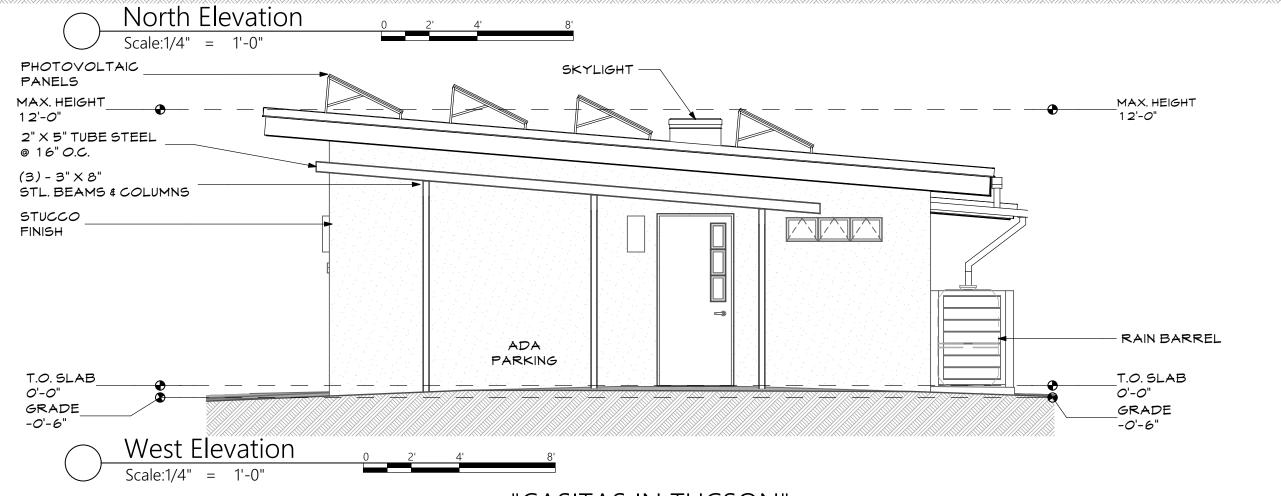


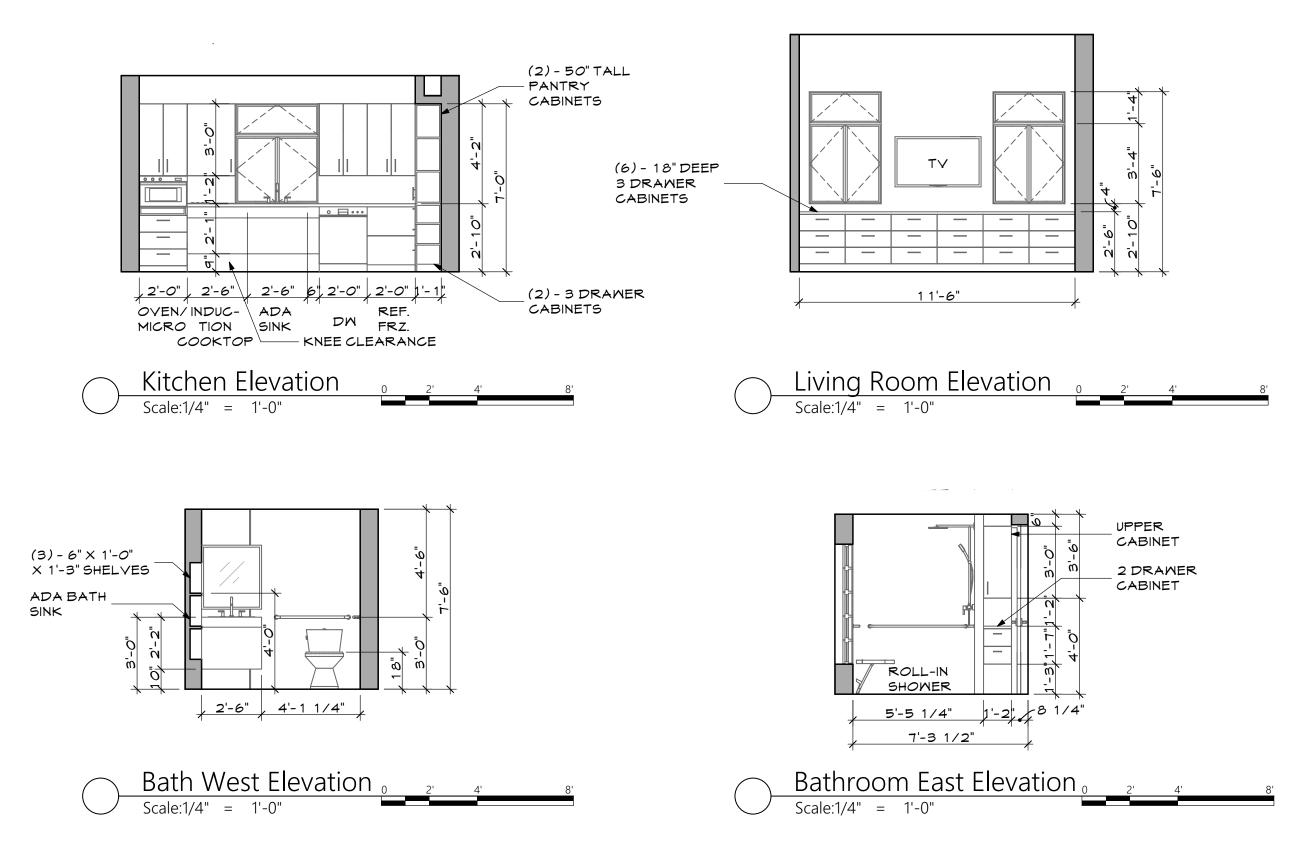




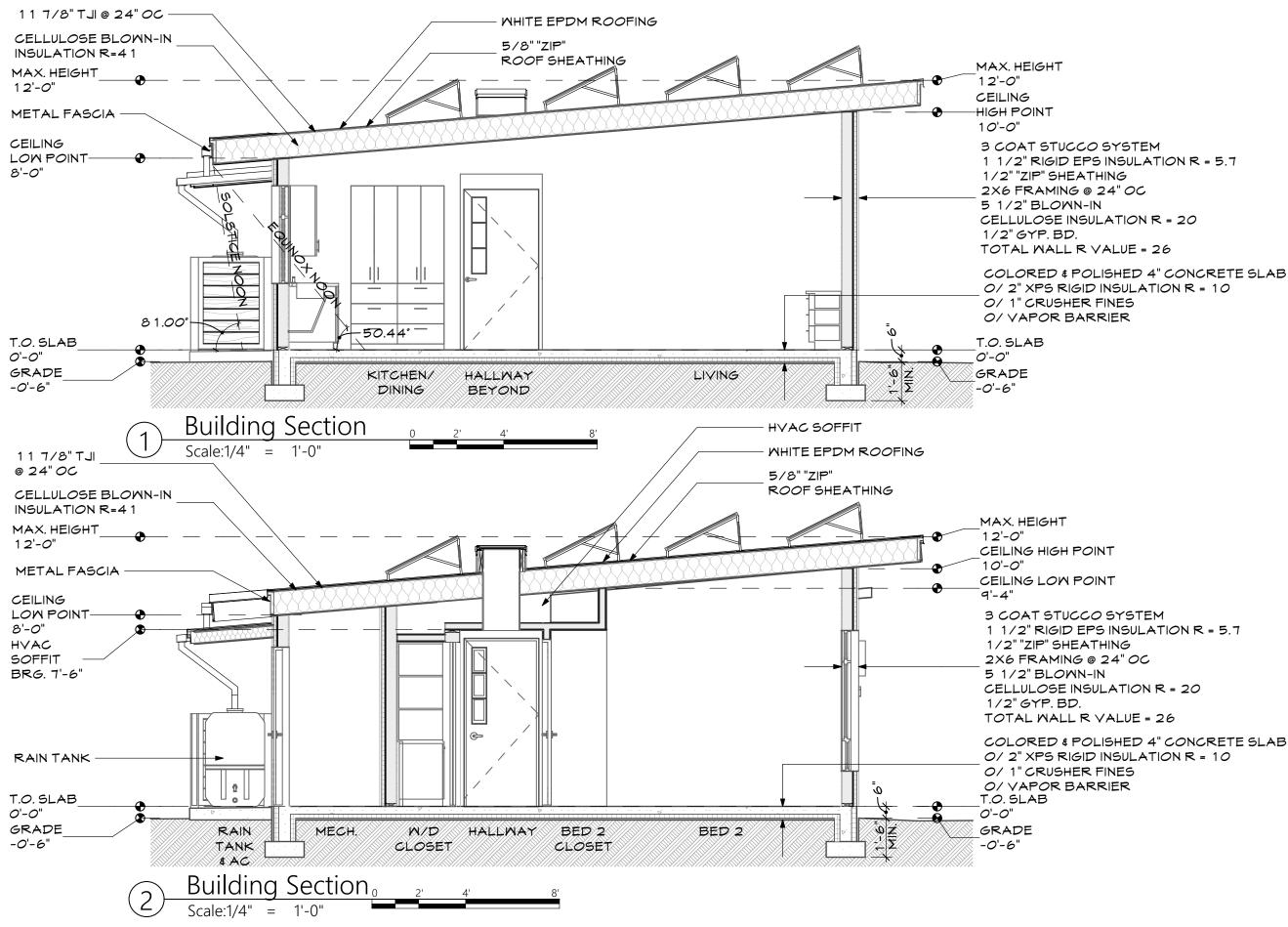








"CASITAS IN TUCSON"
DESIGN COMPETITION SUBMITTAL
2023.09.18



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Southeast Perspective



Northeast Perspective



North Elevation



Northwest Perspective



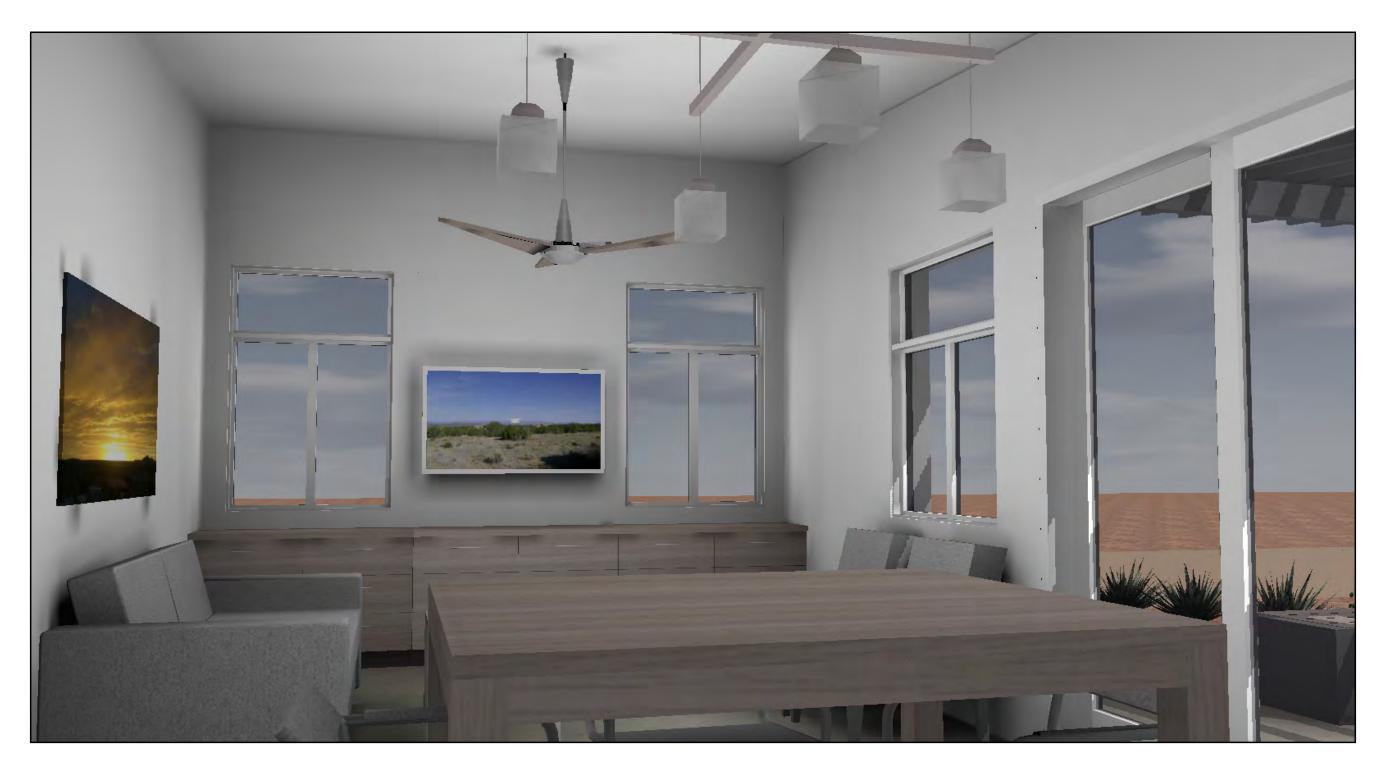
Southwest Perspective



South Elevation



Kitchen Dining Living Section



Living Room Looking North

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Kitchen Looking South

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